

Bauneg Beg Conservation Tour Sunday August 31, 2003



Sponsored by:

**York County Soil and Water Conservation District
Maine Department of Environmental Protection
Bauneg Beg Lake Association**

Agenda/Tour Stops

10:15—Project Overview at the Grange

10:30—Gravel Road BMPs—West 5 and 51

**11:00—Gravel Driveway BMPs and Roof Runoff
BMPs —Demarco residence**

11:30—Culvert Replacement—Punky Parkway

**12:00—Buffer Plantings and Campground Erosion
Control - Waban Summer Camp**

**12:15—Highlight of Remaining Work to be Accom-
plished**

Introduction

In the Spring of 1999, the Bauneg Beg Lake Association, the Maine Department of Environmental Protection (DEP), and the York County Soil and Water Conservation District (YCSWCD) surveyed the Bauneg Beg Lake shoreline areas for erosion and other problems that can impact the health of the lake. They found more than 131 sites that need help.

To continue this momentum and to help fix some of those problems, the YCSWCD was awarded a grant from the Maine DEP and US Environmental Protection Agency (EPA). A Steering Committee of residents from North Berwick and Sanford helped to guide the project. The project is funding (or will fund) the installation and demonstration of several practices to reduce soil erosion and help protect Bauneg Beg Pond.



Project Steering Committee

Special thanks to the project steering committee:

Forrest Bell, YCSWCD (project manager)
Wendy Garland, Maine DEP (project manager)
Steve Gray, BBLA (N. Berwick)
Dawn Harwood, BBLA (N. Berwick)
Lorraine and Bob Hoey, BBLA (Sanford)
Bruce and Shiela Jordan, BBLA (N. Berwick)
Richard Lovejoy, BBLA (N. Berwick)
Tamara Pinard, So. Me Lakes Coordinator
Ray Smith, BBLA President (N. Berwick)
Anne Whitten, Town of North Berwick

Private Road Sites: West Five/West 51

The Problem:

Roads were eroding and depositing sediment into Bauneg Beg Lake.

Sediment carries phosphorus that can lead to algal blooms in the lake if sites are left untreated.



The Solution:

Create a rock-lined ditch, rock-lined sediment basin, below-ground detention basin and reshape and re-surface both roads



The Cost:

Approximately \$6,000 for labor and materials

Approximately \$3,600 of matching funds were provided by Lovejoy builders and Steve Gray



Erosion into the lake can have far-reaching consequences. Soil particles carry the nutrient phosphorus, which essentially “fertilizes” the lake and decreases water clarity. Excess phosphorus can also harm fish habitat and lead to nuisance algae blooms—a mat of green scum. And, studies have shown that as water clarity decreases, property values also drop.

Residential Site: Demarco—Channel Lane



The Problem: Eroding Driveway and Embankment, Steep Slope.

The Solution: Reshape and Resurface the Driveway, Install Open Top Culverts, Install Roof Runoff Trenches.

The Cost: Approximately \$800 with in-kind match of \$500 from the Demarco Family.



Remaining Work to be Accomplished on Sept 20 (volunteers welcome)

- **Additional Plantings on Bank**
- **Erosion Control Mix on lower area**
- **Direct Water to Lower Culvert**

BMP

What is a BMP?

Best Management Practices, also known as Conservation Practices, are techniques to reduce sources of polluted runoff and their impacts. BMP's are often low cost, common sense approaches to reduce stormwater volumes and velocity and keep soil out of lakes and streams.

Private Road Site: Punky Parkway



The Problem: Eroding private road depositing excess sediment onto residential property and into adjacent stream.

The Solution: Install a grass-lined ditch and rock sediment basin, enhance turn-out, reshape and re-surface road.

The Cost: Approximately \$2,600 for materials and labor. An additional \$1,600 cash and in-kind match was provided by Ed Tulley, Lovejoy Builders, and Waban Projects.



How You Can Maintain Your Road and Help Bauneg Beg Pond

- 1. Become educated on camp road maintenance.**
- 2. Seek technical assistance from the York County SWCD, Maine DEP, and Bauneg Beg Lake Association.**
- 3. Form a Road Association to help fund road repair projects.**

Remember—a properly enhanced or repaired camp road will likely cost hundreds (or possibly thousands!) of dollars less than the yearly cost of maintaining a camp road with poor drainage.

Shorefront Restoration: Waban Summer Camp



The Problem: A very large shorefront area eroding into the lake. High foot traffic as well as the yearly removal of organic materials (pine needles, leaves, grass) compounded the problem. Certain areas lacked adequate vegetative buffers.



The Solution: 290 yards (7 tractor trailer loads) of erosion control mix was shipped in from Jay. Heavy equipment distributed the mulch around the site and more than 50 volunteers (including Harold and his red tractor) finished the job! In addition more than 70 plants were added to enhance the lakefront buffer.



The Cost: \$5,256 total cash including the mulch, use of machinery and driver, and plants. Cash match of \$3,256 was provided by Waban Projects while the grant paid \$2,000 in cash. In addition, more than \$3,000 of in-kind match was provided by Bauneg Beg Lake Association and Waban volunteers. This was a great day and showing by the community—thanks to all who helped out!

Residential Site: Jordan's—West 2



The Problem: Steep, eroding bank with little vegetation.

The Solution: Plantings on the bank, erosion control mix in areas of bare soil. Add stone to areas above slope.

The Cost: Approximately \$210 for about 30 plants. In-kind match of approximately \$500 was provided by the Jordans' and the BBLA.



Vegetative Buffer: North Berwick Park



The Problem: Public access area lacks adequate vegetative buffer.

The Solution: Approximately 30 plants were added to enhance the buffer.

The Cost: Approximately \$250 for the plants. In kind match was provided by the BBLA and Town of North Berwick.

Planned Projects—Late Summer/Fall 2003

Shore Access: Morrell's Mill Road

The Problem: Foot traffic and runoff from the roadway has eroded area near the Grange.

The Solution: Install trench to catch runoff, plantings to enhance buffer and reduce erosion.

The Cost: Estimated at \$180 for materials—in-kind match of \$100 needed (or 7 hours labor).



Boat Launch/Camp Road (Funds Permitting)

The Problem: Runoff from Camp Road and Boat Access creating a gully and draining into lake.

The Solution: Turnouts and open-top culverts (or speed bumps) on roadway, new surface material and turnouts on boat access.

The Cost: To be determined



Town Road: Sand Pond Road

The Problem: Runoff from private road and Sand Pond Road causing eroding shoulders and excess sedimentation to the Great Works River (which flows into Bauneg Beg).

The Solution: TBA

The Cost: TBA



Conclusion

Thanks for joining us on the tour. We hope you learned some valuable information to help you protect your valuable resource—Bauneg Beg Pond.

There are many things you can do as a landowner to help the health of Bauneg Beg including:

- **Help support the Bauneg Beg Lake Association**
- **Help form a private road association**
- **Have your septic system pumped every 2-3 years**
- **If you must use fertilizer—use low phosphorus fertilizer**
- **Learn more about water quality or lake science**
- **Join the Great Works River Watershed Coalition**
- **Apply for proper local and state permits**

Some contact information is provided below to help you get started...

Contact Information

Bauneg Beg Lake Association (President Ray Smith): 676-3797

Maine Department of Environmental Protection: 822-6300

Southern Maine Lakes Coordinator (Tamara Pinard): 856-2777

Town of North Berwick: 676-3353

Town of Sanford: 324-9103

York County Soil and Water Conservation District: 324-7015